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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/364,315	07/30/1999	THOMAS T. CHEUNG	ST9-99-078	9277
23373	7590	11/10/2004	EXAMINER	
SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			NGUYEN, HAI V	
			ART UNIT	PAPER NUMBER
			2142	

DATE MAILED: 11/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/364,315

Applicant(s)

CHEUNG, THOMAS T.

Examiner

Hai V. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Office Action is in response to the communication received on 02 July 2004.
2. Claims 50-55 were cancelled.
3. Claims 1-49 are presented for examination.

### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1, 11, 21, 31, 38 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
6. Claims 1, 11, 21 recite the limitation " modifying **the** number of access objects in the access vector " in claims 1, 11, 21. There is insufficient antecedent basis for this limitation in the claim.
7. Claims 31, 38 recite the limitation " manipulating the access vector to change **the** number of access indicators, thereby changing **the** number of simultaneous accesses to the system " in claims 31, 38. There is insufficient antecedent basis for this limitation in the claim.

### ***Response to Arguments***

8. Applicant's arguments and amendments filed on 02 July 2004 have been fully considered but they are not deemed fully persuasive. Applicant's arguments are

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deemed moot in view of the following new ground(s) of rejection as explained here below, necessitated by Applicant's substantial amendment (i.e., modifying the number of access objects in the access vector) to the claims which significantly affected the scope thereof.

***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-49 rejected under 35 U.S.C. 103(a) as being unpatentable over **Ohzora** et al. U.S patent no. **5,940,865** in view of **Radhakrishnan** et al. U.S patent no. **4,720,784**.

As to claim 1, Ohzora, Apparatus And Method For Accessing Plurality Storage Devices In Predetermined Order By Slot Allocation, discloses a method of determining access, the method comprising the steps of: receiving one or more requests to access a system (*Fig. 1, Access demand from users*); and for each request, determining whether to allow access to the system using access vector (*Figs. 1, slot allocation means*) to identify an available access object (*a vacant slot*) (*Abstract, Figs. 1, 9-10; col. 3, line 50 – col. 4, line 17; col. 8, line 29 – col. 9, line 20*). However, Ohzora does not explicitly disclose modifying the number of access objects in the access vector. Thus, the artisan would have been motivated to look into the related networking access arts for potential

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methods and apparatus for implementing modifying the number of access objects in the in the access vector.

In the same field of endeavor, Radhakrishnan discloses (e.g. access vector means) *the master computer can modify the access vector of the slave computers (Radhakrishnan, col. 7, line 19 - col. 8, line 44; col. 12, line 67 – col. 13, line 5).*

Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Radhakrishnan teachings of the master computer can modify the access vector of the slave computers *(Radhakrishnan, col. 7, line 19 - col. 8, line 44; col. 12, line 67 – col. 13, line 5)* with the teachings of Ohzoro, for the purpose of *providing a great deal of flexibility for providing different communication patterns (Radhakrishnan, col. 7, line 19 - col. 8, line 44) and easily and quickly rearranging communication patterns as between computers and which has safety measures to prevent unauthorized accesses (Radhakrishnan, col. 10, lines 56-64).*

11. As to claim 2, Ohzoro-Radhakrishnan discloses, wherein the access object comprises information regarding attributes of the access object *(Ohzoro, Figs. 1, 9-10; user no., slot no., R or R/W in table 2a or 2b; Radhakrishnan, col. 7, line 11 – col. 9, line 41).*

12. As to claim 3, Ohzoro-Radhakrishnan discloses, wherein the step of determining further comprises the step of evaluating whether the request can be satisfied with an available access object based on one or more attributes of that access object *(Ohzoro,*

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*Abstract, Figs. 1, 9; col. 5, lines 10-45; col. 8, lines 29-64; Radhakrishnan, col. 7, line 11 – col. 9, line 41).*

13. As to claim 4, Ohzora-Radhakrishnan discloses, returning a result to the request (*Ohzora, Fig. 10, item S26*).

14. As to claim 5, Ohzora-Radhakrishnan discloses, modifying the access vector upon receiving an indication that a request has completed its access to the system (*Ohzora, after the slot is allocated, the contents of the access schedule table are updated, col. 5, lines 10-26*).

15. As to claim 6, Ohzora-Radhakrishnan discloses, wherein the step of modifying the number of access objects in the access vector is performed while the system is operating (*Radhakhrishnan, col. 9, line 42 – col. 10, line 55*).

16. As to claims 7, Ohzora-Radhakrishnan discloses, wherein the number of access objects is increased (*Ohzora, Figs. 1, 9, col. 5, lines 10-26; col. 5, line 52 – col. 6, line 13; col. 8, lines 30-64; Radhakhrishnan, col. 3, line 60 – col. 5, line 50*).

17. As to claims 8, Ohzora-Radhakrishnan discloses, wherein the number of access objects is decreased (*Ohzora, Figs. 1, 9, col. 5, lines 10-26; col. 5, line 52 – col. 6, line 13; col. 8, lines 30-64; Radhakhrishnan, col. 3, line 60 – col. 5, line 50*).

18. As to claim 9, Ohzora-Radhakrishnan discloses, further comprising the step of modifying one or more attributes of an access object (*Ohzora, Fig. 1, item 2b, Fig. 9, item 52, a slot could be restricted to Read only or Read/Write*).

19. As to claim 10, Ohzora-Radhakrishnan discloses, further comprising the step of allowing one request at a time to manipulate the access vector (*Ohzora, Fig. 1, item 2b,*

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*Fig. 9, item 52, slot 0 is allocated for user number 1 with Read access right, col. 5, lines 1-45).*

20. Claim 11 is corresponding apparatus claim of claim 1; therefore, it is rejected under the same rationale as in claim 1.

21. Claims 12-20 are similar limitations as claims 2-10 and are thus rejected under the same rationale as in rejection claims 2-10.

22. Claim 21 is corresponding computer readable medium claim of claim 1; therefore, it is rejected under the same rationale as in claim 1.

23. Claims 22-30 are similar limitations as claims 2-10 and are thus rejected under the same rationale as in rejection claims 2-10.

24. As to claim 31, Ohzora-Radhakrishnan discloses a method of determining access, the method comprising: receiving one or more requests to access a system; and for each request, determining whether to allow access to the system using an access vector comprised of one or more access indicators (*Ohzora, R/W flags*), wherein only one request at a time uses the access vector (*Ohzora, Abstract, Figs. 1, 9-10; col. 3, line 50 – col. 4, line 17; col. 8, line 29 – col. 9, line 20*); and manipulating the access vector to change the number of access indicators, thereby changing the number of simultaneous accesses to the system (*Radhakrishnan, col. 3, line 60 – col. 4, line 42; col. 7, line 19 - col. 8, line 44*).

25. As to claim 32, Ohzora-Radhakrishnan discloses, wherein said access indicators contain information used to determine validity of the request for access (*Ohzora, Figs.*

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8-9; *Radhakrishnan*, col. 3, line 60 – col. 4, line 42; col. 7, line 19 - col. 8, line 44; col. 9, line 42 – col. 10, line 55; col. 12, lines 40-64).

26. As to claim 33, Ohzora-Radhakrishnan discloses, wherein the information used to determine the validity includes an access level identifier and the validity of the request is determined based upon comparing an access level associated with the request with the access level identifier (*Ohzora*, Figs. 1, 8-9; col. 5, line 1-26; col. 8, line 29 – col. 9, line 20; *Radhakrishnan*, col. 3, line 60 – col. 4, line 42; col. 7, line 19 - col. 8, line 44; col. 9, line 42 – col. 10, line 55; col. 12, lines 40-64).

27. As to claim 34, Ohzora-Radhakrishnan discloses, wherein said access indicators include a resource characteristic and determining the validity of the request further includes comparing information contained in the access request with said resource characteristic (*Ohzora*, Abstract, col. 5, lines 1-39; col. 8, line 29 – col. 9, line 20; *Radhakrishnan*, col. 3, line 60 – col. 4, line 42; col. 7, line 19 - col. 8, line 44; col. 9, line 42 – col. 10, line 55; col. 12, lines 40-64).

28. As to claim 35, Ohzora-Radhakrishnan discloses, wherein the resource characteristic includes one of a resource identifier, resource type, copyright information, type of allowed use, type of allowed user, availability, size, and access level identifier (*Ohzora*, Abstract, col. 5, lines 1-39; col. 6, lines 5-16; col. 8, line 29 – col. 9, line 20; *Radhakrishnan*, col. 3, line 60 – col. 4, line 42; col. 7, line 19 - col. 8, line 44; col. 9, line 42 – col. 10, line 55; col. 12, lines 40-64).

29. As to claim 36, Ohzora-Radhakrishnan discloses, manipulating the access vector to add an access indicator, thereby expanding the number of simultaneous accesses to



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the system (*Ohzora, Figs. 1, 9-10, col. 5, lines 10-26; col. 5, line 52 – col. 6, line 13; col. 8, line 30 – col. 9, line 20; Radhakrishnan, col. 3, line 60 – col. 4, line 42; col. 7, line 19 - col. 8, line 44; col. 9, line 42 – col. 10, line 55; col. 12, lines 40-64*).

30. As to claim 37, Ohzora-Radhakrishnan discloses, manipulating the access vector to remove an access indicator, thereby reducing the number of simultaneous accesses to the system (*Ohzora, Figs. 1, 9-10, col. 5, lines 10-26; col. 5, line 52 – col. 6, line 13; col. 8, line 30 – col. 9, line 20; Radhakrishnan, col. 3, line 60 – col. 4, line 42; col. 7, line 19 - col. 8, line 44; col. 9, line 42 – col. 10, line 55; col. 12, lines 40-64*).

31. Claim 38 is corresponding computer readable medium claim of claim 31; therefore, it is rejected under the same rationale as in claim 31.

32. Claims 39-44 are similar limitations the same as claims 32-37 and are thus rejected under the same rationale as in rejection claims 32-37.

33. As to claim 45, Ohzora-Radhakrishnan discloses, granting access to the system in response to identifying said available access object, wherein said available object is unavailable for further use while said access is granted (*Ohzora, Fig. 10, col. 8, line 65- col. 9, line 20; Radhakrishnan, col. 3, line 60 – col. 4, line 42; col. 7, line 19 - col. 8, line 44; col. 9, line 42 – col. 10, line 55; col. 12, lines 40-64*).

34. Claims 46-49 are similar limitations as claim 45; therefore, they are rejected under the same rationale as in rejection claim 45.

35. Further references of interest are cited on Form PTO-892, which is an attachment to this action.

### ***Conclusion***

36. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai V. Nguyen whose telephone number is 703-306-0276. The examiner can normally be reached on 6:00-3:30 Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 703-305-9705. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hai V. Nguyen  
Examiner  
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JACK B. HARVEY  
SUPERVISORY PATENT EXAMINER

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